

### Abstract of the Disclosure

Disclosed are a method and a system for optimizing location-based services by adjusting the maximum antenna range of a wireless base station. The system for optimizing location-based services by adjusting a maximum antenna range (MAR) of a base station, the system comprising: a test terminal for sending MAR optimizing data, including C-GPS geolocation information and A-GPS data which are received from at least one GPS satellite using conventional-GPS (C-GPS) and assisted-GPS (A-GPS) schemes, to at least one measurement point; a base transceiver station for transmitting and receiving signals and data to and from the test terminal and having a preset MAR; a base station controller for receiving and processing signals emitted from the base transceiver station and a mobile switching center connected to the base station controller; and a position determination entity for receiving the MAR optimizing data through a mobile communication network, analyzing the MAR optimizing data to update the MAR of a wireless base station that meets MAR optimizing requirements, and optimizing the location-based services.